the most significant fact, and one about which there can no longer be any doubt, is that chlorophyll inheritance is sometimes Mendelian and sometimes non-Mendelian. Naturally this suggests that other types of characters also may be, at least in some cases, non-Mendelian in inheritance.—M. C. COULTER.

Plagiotropic shore plants.—From the results of experiments carried on largely with Atriplex prostratum, Turesson<sup>6</sup> reached the conclusion that the external factor causing prostrate growth is intense illumination, but that the growth movements are really geotropic in their nature. Emphasis is placed upon the fact that there are apparently two distinct sorts of plagiotropy, the one resulting from congenital habits of growth, and the other from response to environmental conditions. At times a single species, such as the one under experiment, will prove to consist of two such forms.—Geo. D. Fuller.

Haustoria of Meliola.—Miss Dodge, in continuation of her studies of South African Perisporiaceae, has examined the haustoria of Meliola, whose species occur chiefly on leaves and shoots of forest trees and shrubs. She determined that the species are true parasites, sending haustoria into the cells of the host, penetrating the cuticle and in some cases sclerenchyma cells. The species differ in the length and character of the penetrating filament.— J. M. C.

North American flora.—Part 2 of volume 32 includes a continuation of Rubiaceae by Standley. The preceding part included 20 genera, to which the present part adds 41 more. Much the largest genera are *Bouvardia* with 30 species (12 new) and *Exostema* with 26 species (5 new). The remaining 5 new species are distributed among the smaller genera.—J. M. C.

Vegetation of Paraguay.—Continuing his report on the scientific results of a botanical expedition to Paraguay, Chodat<sup>8</sup> discusses the Apocynoceae, Urticales, and Araceae observed and collected. A number of new species are described, and rather extensive notes are made on distribution and ecology.—Geo. D. Fuller.

<sup>&</sup>lt;sup>6</sup> Turesson, Göte., The cause of plagiotropy in maritime shore plants. Lunds Univ. Arsskrift. N.F. Avd. 2. 16:no. 2. pp. 32. pls. 2. 1919.

<sup>&</sup>lt;sup>7</sup> DOIDGE, ETHEL M., South African Perisporiaceae. VI. The haustoria of the genera Meliola and Irene. Trans. Roy. Soc. S. Africa 9:117-127. figs. 7. 1921.

<sup>&</sup>lt;sup>8</sup> Снорат, R., La végétation du Paraguay. Fasc. 3. Geneva. pp. 291-379. figs. 53. 1920.